

Changeling Cattle and Magical Cows: Traditional Ecological Knowledge in Irish Folklore

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Abstract

Opposition between evidence-based science and improvable religious belief is assumed in Western intellectual tradition. By contrast, Native American theorists argue that religion constitutes part of Traditional Ecological Knowledge (TEK), which this paper argues exists in European contexts. Irish tales of changeling cattle encoded vital data for survival; such folktales or Local Cautions describe human difficulties that follow ecologically inappropriate actions. Other narratives concern interconnections whose significance transcends individual health to include threats to the health of the planetary system; such folktales can be categorized as Global Omens. This paper urges analysis of European folktales and folk rituals as traditional environmental texts.

Keywords

TEK, changelings, holy well, fairy faith, Saint Brigit, cow goddess

Picture this: a hundred years ago in rural Ireland. You look out on the rocky hills of east Mayo or the heathery bogs of Connemara. The country is beautiful, but poor, poor. As the bitter local saying has it, you can't eat landscape.

People live frugally. There is little food, so nothing goes to waste. Traditional meals include crubeens (pig trotters) or drisheen (sheep's blood mixed with oatmeal and tansy). Yet every once in awhile something disturbs this necessary thrift. A cow dies suddenly and is just as quickly buried. Not so much as a steak is cut from its flank before its fearful owners push it into a deep ditch and cover it over, crossing themselves as they walk away from the rough grave.

Perhaps the cow had stumbled into a ditch, or over a rocky cliff, or into a marshy stream. When its body was found, everyone reacted with revulsion born of certain knowledge. For what lay on the ground was not the real animal, which was at that moment kicking up hooves in the Otherworld, but a disguised unearthly corpse. The real cow had been stolen, taken 'away' by those ancient powers called euphemistically the Good Neighbors, the Gentry, or simply Them. In place of the stolen beast, They had put a dead fairy upon which They cast a glamour — a fairy spell — so that passersby saw only a dead cow, fallen haplessly to its death, rather than a wizened fairy cadaver (O hEochaidh 79, McGregor 3).

Why did impoverished people waste meat in this way? Hundreds of pounds of beef tossed away, buried while children scabbled in the mud for potatoes and ate pig offal, all because of invisible fairies? From the standpoint of the Western scientific tradition, such superstitions derive from a magical worldview long since replaced by a superior mechanistic one; such tales are allotted no value except as entertainment, while science is believed to capture and convey the truth about nature. But as early as 1947, folklorist Weston LaBarre pointed out the cultural relativity of that presumption, noting that 'when folk beliefs are cast in a slightly foreign framework of reference, and we can't immediately translate their data into our own intellectual language, the easy reaction is to dismiss them impatiently as groundless "superstition"' (105).

Many Irish folk tales are far more than groundless superstition; they encode environmental understanding necessary for survival in subsistence economies and, in some cases, for survival of the planet as well. The sense of individual caution is clear in this version of a tale from Anglo-Irish folklorist Lady Gregory, which tells of an unscrupulous profiteer who ignored evidence that an animal had been ‘taken’ (a word that, like ‘away,’ has specialized meanings of kidnapping and shapeshifting where fairies are concerned):

When any one is taken something is put in their place — even when a cow or the like goes. There was one of the Simons used to be going about the country skinning cattle and killing them, even for the country people if they were sick. One day he was skinning a cow that was after dying by the roadside, and another man with him. And Simon said, “it’s a pity he can’t sell this meat to some butcher, he might get something for it.” But the other man made a ring of his fingers like this, and looked through it, and then bade Simon to look, and what he saw was an old piper; and when he thought he was skinning the cow, what he was doing was cutting off his leather breeches. So it’s very dangerous to eat beef you buy from any of those sort of common butchers. You don’t know what might have been put in its place. (134)

In this telling, the health warning seems clear enough: avoid meat from unknown sources, for it might be tainted. But such a ‘taint,’ undetectable through normal senses of smell or taste or vision, would elude the finest modern meat inspector. Rather, a magical gesture is necessary — peering between the fingers or tearing a hole in a blade of grass to form a magic circle through which the truth can be seen. The warning against eating meat from unknown sources derives from the deeper prohibition against eating meat from changeling cattle, which might be foisted upon an unwitting stranger where a local person would have recognized its dire provenance.

To establish what value the avoidance of bewitched meat might have had, we must consider possible causes for sudden cattle death. The folktales describe cattle that died without known illness and in peculiar circumstances. Such a death must have been symptomatic of an underlying but previously undetected disease, for healthy cows do not pitch themselves off cliffs or drop like stones into rivers. An animal that grows dizzy in the middle of a flat field may suffer from one of several neurological disorders that could infect people who eat its flesh.

The folktales are clear in distinguishing changeling meat from more easily recognized cattle diseases. Plagues were well-known and dreaded; Scottish chronicles tell us that an epidemic in 1129 killed most of the pigs and cattle in Ireland. Although the chronicles do not say so, human death — directly from starvation or indirectly, from the weakened immune system that attends it — without question followed upon the animal loss, and thus cattle plagues were as feared as human ones. But changeling meat was no epidemic, for the tales describe a single animal toppling over in a field rather than a herd sickening as disease swept through. While it is now impossible to test those long-dead cattle, recent science suggests a reason for the aversion to changeling meat: a response to the threat of spongiform encephalitides, found as scrapie in sheep, Mad Cow in cattle or Chronic Wasting Disease (CWD) in deer and elk. Scrapie has been documented in parts of the United Kingdom from at least the mid-1700’s, as shown by discussion in parliament at that time about governmental need to address the issue; nothing indicates that it was a new disease then. Although scrapie is not believed to cross the species barrier between sheep and humans, feeding infected sheep parts to cattle is likely involved in Mad Cow disease, which can be then transmitted to humans. In scrapie, mad cow and CWD, one of the main features is ataxia — lack of balance and coordination in walking

— which leads to falls and the inability to avoid dangers such as displaced boulders (Brown and Bradley 1998). Changeling meat may have been produced in cattle when a poor farm family failed to properly dispose of waste from an infected ovine, which then entered the bovine food stream.

Mad Cow does not pass readily between cattle in a herd, any member of which could suffer the infection for years without passing it along. Humans consuming the flesh of an infected animal could gestate the illness for up to a decade before they became nonfunctional due to lesions on the brain. By the time the human victim fell ill, years would have passed since changeling meat was served up for Sunday supper. But because the amount of meat from a dead cow is more than a single person could eat, it is likely that several members of a family would have shared the meal, later dying in the same manner. It would be left to their community to connect the cow's mysterious misfortune with that of its owners, dying one after another from the same strange malady, now called variant Creutzfeldt-Jakob disease. This hypothesis suggests that the legend has a basis in observation, the same kind of careful observation of the natural world that a scientist would employ. But no scientist would drag the fairies into the matter. Would not a description of the disease serve as warning enough? Here is such a warning, couched in scientific language:

Prion diseases are transmissible spongiform encephalopathies of humans and animals. The oral route is clearly associated with some prion diseases, according to the dissemination of bovine spongiform encephalopathy (BSE or mad cow disease) in cattle and kuru in humans. However, other prion diseases such as scrapie (in sheep) and chronic wasting disease (CWD) (in cervids) cannot be explained in this way and are probably more associated with a pattern of horizontal transmission in both domestic and wild animals. (Lupi 1037)

In a society that retains information in oral rather than written form, information must be encoded in a way that is easily remembered and repeated, generation after generation. If Mad Cow occurred once each century, several generations would be born and die without seeing its specific symptoms. Facts are harder to remember than stories and images, which have emotional power that fact does not. The vivid image of a rotting fairy cadaver bewitched to look like a cow is repulsive enough to warn off anyone, even someone quite hungry, who thought of carving a rump of changeling meat. Thus the legend may have protected untold generations of superstitious Irish farmers more effectively than memorization of facts could do.

Lest one should think that this belief has died away in 'Celtic Tiger' Ireland, recently Irish-language poet Siobhán ní Ghabhann (2007), a spinner and hand-knitter, lost one of her sheep suddenly. The animal simply died in the field. She went out to shear it, unwilling to lose its fleece before burying it. But her neighbors deterred her from what seemed to her to be simple thrift. 'They told me there was no way anyone would wear anything made from that fleece,' she said. The sheep was buried, fleece intact.

Such folktales are not widely accepted as sources of environmental information, which is easily credited when it comes from science, where observation of nature is followed by experimentally-sustained theories that lead to reproducible results. The major scientific language is measurement. Like its corollary, mathematics, measurement is imagined to be free of cultural values; measurement is global if not universal, its results the same no matter the location of the experiment. As Aldous Huxley said, 'from the whole of experience only those elements which can be weighed, measured, numbered, or which lend themselves in another other way to mathematical treatment' (in Peat 239) are studied by science.

Yet mathematics, especially Euclidian geometry, is Platonic in describing an invisible world, a world of smooth, regular ideals rather than the real world around us, filled as it is with irregular jagged forms like mountains, rivers, trees and human bodies. As American Indian scholar Leroy Little Bear puts it (in Cajete, viii), ‘mathematics is...like the land survey system: a grid framework of townships, sections and acres superimposed on the land. These units, in turn, are used as the basis for dealing with the land, but they are not part of the nature of the land.’ By contrast, folklore is bound to a specific place and expressed in a specific human language that arises from a particular culture. Such cultures offer explanations about natural phenomenon that are discounted as unscientific because, as Gregory Cajete articulates this argument in order to banish it, ‘Science is essentially a Western concept...while Indigenous people have folkways and folk knowledge, this knowledge is not scientific’ (3).

By ‘science’ Cajete means what Mike Michaels calls ‘science-in-general,’ (313), the social and linguistic construction of science as ‘a coherent entity ... (with) its knowledge domain of technological and natural phenomenon.’ Such science-in-general can be recognized as much by what it is not as by what it is: ‘science is not about ignorance, and it is not about self’ (317). In scientific discourse, as Lyotard points out (23-27), speakers seek for linguistic clarity and lack of ambiguity, and there is no need of a social bond between speaker and listener. ‘Science,’ Lyotard pointed out, ‘has always been in conflict with narratives’ because ‘judged by the yardstick of science, the majority of them turn out to be fables’ (xxiii).

The discourse of folklore could not be more different. The traditional Irish storyteller, the *seanachie*, derives power language’s multireferential possibilities and from the relationship between speaker and listener. Yet this is not contrary to the scientific endeavor, for the discourse of science hides the relational character of its actual work. Just as there is no real ‘science-in-general,’ only particular scientists engaged in particular studies, so there is no ‘storytelling-in-general’ but individual storytellers from various traditions, telling particular stories to a particular group. Even more importantly, as Robert Georges points out, in oral culture there is no actual story separate from ‘the storytelling event,’ which is by definition unique, occurring ‘only once in time and space’ and ‘only once with a particular set of social interrelationships’ (316, 319).

Until recently, storytelling was a major focus of social life in rural Ireland. Joe Ó Domhnaill of Inis Oirr described a traditional storytelling session, a nightly feature of life in his area: When the children had been put to bed, the others would draw closer to the fire. The householder would fill his pipe and would settle down in the corner and the woman of the house would settle down in the opposite corner. When he had lit and smoked the pipe, one of the company would ask the householder:

‘Please, tell us a story, Máirtín.’

‘What kind of story would you like?’ he would say, ‘A story about the old times?’ and he would tell a story then ... The storyteller never tired of telling these stories year to year. (Becker 15-19).

The role of the *seanachie* was not only to entertain, although his or her local renown might rest on that ability. Folktales were instructional, both about specific ecological knowledge and about the proper way to understand the environment’s spiritual context; these two aspects of the tales were deeply intertwined. As David Vellerman has pointed out, ‘a story does more than recount events; it recounts events in a way that renders them intelligible, thus conveying

not just information but understanding' (1). Science is essentially free of story; with the exception of cosmology, which describes events such as the Big Bang, scientific language avoids plot and characterization, two important components of storytelling. Oral cultures, by contrast, rely on the resources of narrative to make stories memorable. This reliance upon story does not mean that the natural world is not well-observed. Indeed, the examination of folklore and folk remedies shows intimate knowledge of nature.

The oral tradition was once believed to be fluid and thus likely inaccurate in conveying information, but the work of Milman Parry and others long since set this belief to rest. The Irish storyteller, as a repository of traditional wisdom, had the responsibility to convey tales with precision. The best storytellers did so with astonishingly skill. As William Butler Yeats said in the late nineteenth century, 'Stories have been handed down with such accuracy that the long tale of Deirdre was, in the earlier decades of this century, told almost word for word as in the very ancient MS in the Royal Dublin Society. In one case only it varied, and then the MS was obviously wrong — a passage had been forgotten by the copyist' (xix). Such exact information provided not only historical and religious information, but scientific and environmental data as well.

The stories discussed here were originally told in Irish, a language that suffered decline almost to extinction as part of general attack on Irish culture based in desire for land and resources by a colonizing power. Such language loss makes culture difficult, perhaps impossible, to sustain. As Oscar Kawagley, speaking of his own Yupiaq language, puts it: 'language is ... critical because it intimately connects one to the ancestors and their thought world. This is a spiritual, emotional and intellectual connection that helps to shape all thinking and all behavior' (51). In relating these stories in English, we acknowledge that we cannot help but alter their meanings, however subtly.

The worldview expressed by the Irish language derives not only from the Indo-European Celtic culture but embraced pre-Celtic culture as well. Although Christianized in the 5th century, Ireland held on to legends, rituals and other aspects of its earlier religion, so much so that paganism and Christianity coexist in Ireland to this day in what archaeologist Proinsias MacCana calls 'an extraordinary symbiosis' (in Logan 1980, 13). Not a synthesis, not two things melded into one, but two entities combined for the benefit of both, interdependent though still detectably separate.

Irish spiritual culture is a necessary component of discussion of Irish folklore as well as of its native science. I henceforth will use the term 'spirituality' rather than 'religion' in the spirit of Lee Irwin, who points out that the latter word implies 'a post-enlightenment concept often rooted in a polarity between ideas of the "sacred and profane"' (311). Similarly, the term 'native science,' denoting a science rooted in spirituality, will be employed to describe Irish tradition because as Jefferson Fay points out, the term describes a 'scientific worldview rooted in holism,' a belief that 'the Earth is alive' (273), a worldview that the Irish traditionally held. If science claims to offer explanations that reveal an understanding of the natural world then, following Vellerman, we can ask whether indigenous spiritual narratives convey 'a different kind of "understanding," which requires a different model and perhaps even a term other than "explanation" (1),' and thus a different kind of science.

The science embedded in Irish folklore can profitably be examined using theories developed by Native American scholars including Vine DeLoria, Jr., Daniel Wildcat, Gregory Cajete and Pam Colorado. These theorists argue that far from being the polar opposite of science, Indian tradition as a whole constitutes a native science, defined by Cajete as 'born of a lived and

storied participation with the natural world' (2). As defined by Raymond Pierotti and Daniel Wildcat, native science or TEK (Traditional Ecological Knowledge) 'converges on Western scientific approaches' because it is 'based on close observation of nature and natural phenomenon,' but differs from Western science because 'it is combined with a concept of community membership that differs from that of Western political and social thought.' In brief, the native worldview holds that 'all things are connected' and that 'all things are related' (1333).

Physicist David Peat, a member of what he calls the 'Western science tribe,' describes a typical scientific reaction to these ideas: 'I believe the verdict of most "hard-nosed" scientists would be that while Indigenous metaphysics and philosophy is certainly fascinating and, to the extent that it brings people close to nature, attractive; nevertheless, it should not be called a science' (xiii). He argues that such a comparison stems from a hierarchical vision that assumes a necessary ranking of two ideas when both could be embraced. 'It is not so much the questions themselves that are the problem,' he says, 'but the whole persistent desire to obtain knowledge through a particular analytic route' that gives primacy to books over experience, to acquisition rather than transformation (5-6). Native science, rooted in a holistic worldview and expressed through story rather than mathematics, offers a vision of the world that reveals some of what Western science ignores or excludes.

For all the power of their argument, however, proponents of native science often incorrectly assume a uniformity within Western culture. Joseph Epes Brown claims that, 'Western ethical traditions have been resolutely — some even militantly — anthropocentric (i.e. human centered)' and finds 'a widespread belief within Western culture that the nonhuman world was but a pool of resources existing only to satisfy human needs and wants' (3). Pierotti and Wildcat maintain that, 'Despite apparent differences, all Western attitudes towards nature come from the same European philosophical roots, i.e. Descartes, Bacon, and the Enlightenment' (1334). This latter idea would come as a surprise to unlettered traditional storytellers in the west of Ireland for whom De Cart was something to carry De Pig in, and Bacon was what you made out of Dat Pig. Like traditional people of the Americas, the Irish lived in direct and constant contact with nature, of which they saw themselves a part rather than as separate. The following descriptions of relationship to nature can profitably be compared:

In most cosmic or earth-centered religions, the places on the earth possess a particular power that is creative and regenerative... The shape of the earth's surface creates innumerable nooks and crannies, each having a different quality about them and thus defining itself as a place having its own particular power ... The ... countryside was dotted with such places, each of which emanated a particular feeling or power. It was this power arising from the place that made possible the events that actually named each place.

Anecdotes and place-names remind them that *here* an emissary from the world of myth or legend made its presence known; over *there* something wondrous or unexplainable or terrifying happened; right *there* some spark was struck between the everyday and the extraordinary, creating a memory so bright that some still go there to pay respects or conduct rituals or contact the spirits.

The latter citation (Nabokov 3) describes the world-view of Native Americans; the first, that of the traditional Irish (Brenneman 22). In both cases, we find a focus on particular places, carefully observed so that their intimate details become known over time and then cloaked in memorable story. Although the measurement required by Western science is not employed,

the spiritual measure of such places is taken and retained in oral memory. As Walter Brenneman and Mary Brenneman argue, Irish indigenous spirituality is similar to that of other earth-centered cultures (11), which are distinct from those defined by Mircea Eliade as linear and 'historical.' Such historical cultures, which include the predominant Western intellectual model described by Native Science theorists, see nature as a collection of examples of 'universal forms or models that apply to all people' (43). Specific places become inconsequential except insofar as they represent larger categories; Tobarnault, a holy well in the western county of Sligo, fits the category of 'bedrock spring' and can thus be compared to other such springs in measurable terms such as output of water per minute, depth of underground source, and fluctuation of output, but is unique only in the ways it differs from the norm of that category. The 'historical' worldview fits well with Western science, with its focus on linear progression and evolution.

But in Irish tradition, holy wells are not examples of some Platonic reality, nor are they best described in merely scientific terms. Rather, each holy well constitutes part of Ireland's 'mosaic of "places",' known through a worldview that cherished 'otherness rather than sameness, particularity rather than universality' (Brenneman 43). Such places can only be fully known through the stories told of them — in the case of Tobernault, of the blind people healed with its waters and the insane who find their way across the land in the darkness, to huddle by the well at dawn. The worldview that encompasses such stories is cyclical and, in the Brennemans' definition, 'cosmic,' defined as 'linked to an ecological milieu that abounds in fertility.' The traditional Irish worldview derives, as does the Native American, from a vision of nature as immeasurably holy, understood through story and ritual in specific rather than generic places.

Such is the worldview that sustains and supports the tales considered here, which represent two categories of native Irish science. In the first category, the story provides information that is useful, even vital, for human survival. While these stories are rooted in a worldview that defines the Earth as alive, that vision remains background to the primary purpose of the story, which is to convey environmental information that assists the hearer in day-to-day tasks necessary in a subsistence economy. Changeling meat is one such story. The Otherworld, from which the thieving Gentry sneak forth to place their cadaver in place of the newly-dead cow, provides a greater-than-human context for the story, but the emphasis is placed upon human survival. Let us call such stories Local Cautions.

Another example of a Local Caution, found in varying versions throughout Ireland, describes a holy well that flees from a place after the residents pollute it. Thousands of such wells are still active sites of ritual in Ireland, as well as in Scotland and Wales (Healy 19). Originally pagan sites, the wells were Christianized, often by Saint Patrick himself who penetrated the well with his crosier, thus 'saining' it (Brenneman 83). Such conversion, far from destroying the well's power, kept it alive in a new era. As Westropp puts it, 'With the usual wise tactfulness of the ancient Irish missionaries all that was harmless was adopted into the new religion, and the wells lost none of their old observances and honour' (50).

Holy wells are often bedrock springs that run pure no matter the weather; as such, they are often the only reliably clear water sources in a region. Some wells, however, are notable not for their consistency of flow but for other reasons, as when a well is connected through underground passages to the ocean and therefore is sometimes salty, sometimes fresh, or when a well runs red due to a concentration of iron in the water. In pre-Christian times, the wells drew power from their connection with the Otherworld of the fairies; they also served as inaugural sites for regional kings who drank the water as a pledge of fidelity to the goddess of the land. Such beliefs and customs died out after Christianization, but belief in the healing

potency of holy well water remained. Even after rededication to saints, pagan vestiges remained, as when the water was believed especially potent on the Celtic holidays, marking the midpoint between solstices and equinoxes.

It is a curious feature of holy wells that they were not believed tied down to a specific locality. Wells could move offended by people doing laundry or dumping litter or garbage in their waters; disposal of cattle viscera or corpses especially insulted holy wells (Bord 78-79). Altering the course of a well was also insulting, as did fencing it off to create private property (Brenneman 4-5). Tales abound of wells departing in the middle of the night accompanied by tiny lights carried by parading fairies; the next day the well would be found in its new home, some distance from the original. A nineteenth century writer for the Ordinance Survey carefully if credulously described one such well as having ‘moved twice, from the graveyard in Cloone to Esker T, where a woman washed clothes in it, and thence to its present site’ (Brenneman 5). Offended wells that remained stationary could turn vengeful, poisoning the guilty persons or their cattle: ‘Another man is said to have put up a fence at St. John’s Well where people did rounds. Because he prevented this practice, all his animals died’ (Brenneman 5).

The science behind such cautionary tales is easy to discern. Cattle viscera dropped in a well could spread tapeworm, which must pass through the intestines of cattle or pigs in order to infect humans. Washing laundry in the well could spread any number of water-borne diseases including the protozoa-caused disease Amebiasis that causes gastrointestinal distress; Hepatitis A and polio, both of which can be spread through water; and dysentery and typhoid. Urine and fecal matter are among the most common sources of such diseases, either or both of which can be carried on clothing and spread through the holy well. Changing the flow of the holy well might have deleterious effects on a region’s environment, causing disruption to other aspects of the ecosystem with impact on the human community. Finally, fencing off holy wells may have forced people to use less-potable water sources, causing infection and possible epidemic. The Local Caution warned people against ignoring public health for their own convenience and showed the dire consequences of such behavior.

Another type of story, which can be called the Global Omen, deals with survival of the entire planet rather than of individual humans. Among such stories we find tales about the Glas Ghaibhleann or Gaibhle (Anglicized as Glas Gavlen), a mythic cow who gave cream rather than milk. Even if years had passed since her last calving, the Glas’s milk flowed without cease, so plentifully that she fed multitudes. She was astonishingly strong as well. She could wander through three of Ireland’s four provinces in a single day; place-names like Knockglas, ‘mountain of the Glas,’ bear testimony to her passage. She was ‘the wonderful “glaucous cow” whose footprints mark the rocks in every direction’ (Westropp 4) in County Clare where names like Mohernaglasha (‘ruins of the Glas’) and Leabanaglasha (‘bed of the Glas’) are common; indeed the Glas plays ‘a large part in the traditions’ of the area, her ‘hoofmarks pitting all the rocks of the eastern Burren and its borders’ (58). As she traveled, she gave milk to anyone who milked her, filling whatever vessel they carried, no matter how large or small. Ireland never suffered from famine so long as the great cow roamed freely.

But human greed threatened this force of abundance. Legends describe people who tried to pen the Glas for their own exclusive enrichment. Sometimes she escaped or was freed, bringing abundance back to all the people (Logan 1981, 119). Unfortunately, not all stories end happily; many times, the Glas abandoned humanity out of disgust. In one tale, the Glas was confined within the confines of Donegal’s Glen Columkille, to escape which she levitated herself into the air and, clearing the high ridges, disappeared into the sky. Since that time, there has been no free milk in Ireland, although you can see the Glas’s rich milk spread

across the sky as Bothar Bó Finne, ‘the grazing-path of the white cow,’ the Milky Way. Other legends claim that a wicked woman tried to milk the Glas into a sieve and, angered at the sacrilege, the cow disappeared from earth. Another story says that someone tried to milk the Glas into a swallow-hole in limestone called Poll na Leamhnachta (Hole of Sweet Milk). When the Glas’s immeasurable milk could not fill the endless cavity, she disappeared from the earth forever (MacNeill 167-168).

The story is common throughout Ireland and stretches into its neighboring island as well, possibly brought there by Irish immigrants. In Britain, as in Ireland, the Dun Cow was tragically tricked: a witch tried to milk her into a mesh, killing the miraculous beast. In Wales, the cow Fuwch Laethwen Lefrith wandered the country, generously giving forth milk until she reached a valley, Towry, where the residents saw her as potential steak-and-kidney pie. But before they could slaughter her, she disappeared (Burne 412-434 Hull, 106-117, 150-53, MacKenzie 176-194).

Although usually described as divine, occasionally the Glas is transformed into a fairy cow, as in the following tale collected in 1999 in Liscannor, Co. Clare, by the contemporary folklorist and *seanachie* Eddie Lenihan:

There was a story told, ‘twas common knowledge in the area when I was going to school, about this cow, a fairy cow. She used to billet above where the bush is in Latoon and she used to come down every morning via Clonmoney. And of course, the people o’ the parish used to all milk her on the way down. She supplied milk to the poor people o’ the parish. She was something on the same principle as the manna in the desert. She was a white cow. And you could milk her a million times and she’d still supply milk. (But then)...some smart aleck on the way bet his neighbor he’d find a utensil that she wouldn’t fill. So he produced a sieve and milked her into that. She couldn’t fill that, o’ course. When the facility was abused, she came along until she came to Clonmoney, below the Hurler’s cross. There’s a stream crossing the road there called the Sruthán (‘stream’). She took a drink out o’ that stream and she showed up no more. (87)

In our world of farm monoculture, feedlot fattening, and subsidy-encouraged overgrazing, cattle are no longer kin to humans but capital (*cattle*, *kin* and *capital* all derive from the same root). Behind this behavior is a metanarrative that defines the planet in mechanistic terms. The metanarrative of the tales of the Glas is quite different, showing nature as abundantly generous but ready to withdraw should people not act respectfully. The Glas stories show the entire human race punished for the behavior of a single person, or a few greedy ones. The tales illustrate sensitive dependence upon initial conditions (‘the butterfly effect’) of chaos theory, which describes the way a single small action can cause massive changes; in this case, Irish folklore predates and predicts Western scientific understanding.

These two story categories are offered as a framework for discussing native science in folklore from Ireland and other lands: Local Cautions offering anthropocentric environmental information based in close observation of immediate natural events, while Global Omens describe complex natural systems in which humans are but one part. But in the Irish context, the division must always remain somewhat arbitrary, for even in Local Caution tales, a non-anthropocentric worldview is revealed by mention of those demoted gods called, in Irish, the *Sidhe*. Usually translated as *fairies*, a word that unfortunately conjures up tiny nature sprites, the *Sidhe* are elemental powers from an alternate dimension. Their beautiful changeless fairyland was until recently in Ireland ‘as much an accepted reality to the country people as has the normal material world around them,’ according to folklorist Dermot MacManus (15). Although recent economic success means that such belief is not often spoken of, Eddie Lenihan finds the belief has not entirely died out:

A land-reclamation contractor of my acquaintance — a man usually plastered with oil, happiest when dismantling bulldozer engines, one far removed from anything extra-terrestrial, it might seem — put it very succinctly for me when I asked whether he would bulldoze a fairy fort:

‘I wouldn’t. An’ I’ll tell you why. First of all, I have my business to be thinking of. An’ as well as that, the fuckin’ world is big enough for them an’ for us.’ (in Monaghan, 309).

Mention of Them casts the long shadow of the Otherworld on even the most this-worldly tale of human survival. Every such mention calls to mind the danger that infringing upon Their property entails. Irish folklore is filled with stories of the punishment meted out to humans who fail to attend to fairy demands. Building an addition on the west of one’s house interferes with easy passage of fairies, and so They knock it down; bulldozing a tree where They rest brings on the paralyzing stroke (a term still in use by Western medicine) of the fairy hand. Their presence in any story shows that power does not ultimately rest in human hands. As Lenihan has said (in Monaghan 311), belief in the Fairies is anti-capitalist; capitalism is based on an idea that any part of the world can be owned, but Irish traditionalists believe some parts of the world are already owned by fairies and thus fall outside the profit economy. And because such places can move, land developers had best beware.

In tales of changeling meat, fairies are the source of the bewitched cadaver. Some traditions expand on the connection by asserting that the farmer on whose cattle the mysterious death was visited had offended The Gentry, possibly by cutting down a fairy tree (121 MacManus) or by otherwise showing lack of care for nature. Such an insult to the environment brought fateful results:

A man named Caffney cut as fuel to boil his pot of potatoes some of these undisturbed bushes round which the fairies pass. When he put the wood under the pot, though it spat fire, and fire-sparkles would come out of it, it would not burn. The man pines away gradually. Just before he died, he told his experiences with the wood to his brother, and his brother told me. (Evans-Wentz 33).

In the holy well tales, the fairies appear as candle-carrying witnesses to the well’s offended departure. But the deepest folkloric connection between Irish Local Cautions and Global Omens appears when holy wells and other watersources are named for the great cow goddess of natural abundance. Although most commonly dedicated to the goddess Brigit (now Christianized into Saint Bridget), holy wells can also carry the names of other mythic or saintly personages. At least three wells in Ireland (one each in Counties Sligo, Donegal and Cavan) bear the name Tobar na Glaise, ‘cow’s well’ (Logan 1980 56). She also appears under the name Bóand or Bó Find, ‘White cow,’ divinity of the Boyne River that drains the eastern half of Ireland from its source in Trinity Well (Logan 1980 48), County Kildare. The river, legend says, was formed when the goddess approached Carbury Hill, home of her consort Nechtan and thus called *Sídh* (fairy hill) *Nechtán* (of Nechtan). Seeking spiritual wisdom contained in magical hazels that dropped their nuts into the water, Bóand offended the well, which rose and chased her all the way to the ocean, where she drown. The freed well waters never retreated to their former confines, forming instead the river that bears Bóand’s name.

A similar story tells of a woman who profaned a holy well by doing laundry in its waters. ‘As a consequence of the insult a calf, which lived at the bottom of the well, jumped out and ran towards the valley which is now filled by Loch Gamhna and, as could be expected, the water rose and followed the calf and so formed the lake under which the supernatural calf now lives’ (Logan 1980 49). Such narratives show how nature can respond with landscape-altering

speed to refusal to attend to its laws. The tales carry an important message for us today, as the earth teaches us how deeply connected human health and happiness is with the health of the planet. As Gregory Cajete says, 'The Earth is dying...As toxins enter the food chain in greater and greater quantity, all parts of the food chain become more toxic, the corn becomes toxic, and even our tears and our bodies become toxic' (279). When indigenous religion speaks of humans as children of an earth goddess, more than metaphor is at work.

Although Native Science was not developed with European folklore in mind, its concepts can be applied to Irish and other myths and legends to uncover the ecological meanings they hold. Rather than imposing upon American Indians to share their cultural wisdom, Americans of European heritage can seek similar environmentally-meaningful narratives within their own cultural background. Indigenous wisdom from any part of the world can be welcomed as a warning call to which we should attend. And such native science should be honored as another form of knowledge that stands beside measurement-based Western science. As Physicist David Peat says in his dream of a union of native and Western science that will heal the planet, 'Maybe...we can all engage in a ceremony of renewal that will cleanse earth and sky. Maybe the time is right' (312).

Sources

- Becker, Heinrich. *Seaweed Memories: In the Jaws of the Sea*. Dublin: Wolfhound Press, 2000.
- Bord, Janet and Colin. *Sacred Waters: Holy Wells and Water Lore in Britain and Ireland*. London: Granada, 1985.
- Brenneman, Walter and Mary Brenneman. *Crossing the Circle at the Holy Wells of Ireland*. Charlottesville: University of Virginia Press, 1995.
- Brown, Joseph Epes, with Emily Cousins. *Teaching Spirits: Understanding Native American Religious Traditions*. New York: Oxford University Press, 2000.
- Brown, P. and R. Bradley. '1755 and all that: a historical primer of transmissible spongiform encephalopathy.' *British Medical Journal*, Dec. 19-26, 1998; 317 (7174), 1688-9.
- Callicott, J. Baird and Michael P. Nelson. *American Indian Environmental Ethics: An Ojibwa Case Study*. Upper Saddle River, NJ: Pearson/Prentice Hall, 2004.
- Evans-Wentz, W.Y. *The Fairy-Faith in Celtic Countries*. Gerrards Cross: Colin Smythe, 1977.
- Faye, Jefferson. 'Subverting the Captor's Language: Teaching Native Science to Students of Western Science.' *American Indian Quarterly*. Volume 25, No. 2 (Spring 2001), p. 270-273.
- Ghabhann, Siobhán ní. Personal communication, September 28, 2007.
- Georges, Robert. 'Towards an Understanding of Storytelling Events.' *The Journal of American Folklore*. Vol 82, No. 326 (Oct-Dec, 1969), p. 313-328.
- Gregory, Lady Augusta. *Visions and Beliefs in the West of Ireland*. Gerrards Cross: Colin Smythe, 1970 (facsimile edition, The Coole Edition, 1920).
- Gribben, Arthur. *Holy Wells and Sacred Water Sources in Britain and Ireland: An Annotated Bibliography*. New York; Garland Publishing, 1992.
- Healy, Elizabeth. *In Search of Ireland's Holy Wells*. Dublin: Wolfhound Press, 2001.
- Irwin, Lee. 'Introduction: Themes in Native American Spirituality.' *American Indian Quarterly*. Vol 20, No. 3/4 (Summer-Autumn, 1996), p. 309-326.
- LaBarre, Weston. 'Kiowa Folk Sciences.' *The Journal of American Folklore*. Vol 60, No. 263 (April-June, 1947). 105-114.

- Lenihan, Eddie, with Carolyn Eve Green. *Meeting the Other Crowd: The Fairy Stories of Hidden Ireland*. New York: Jeremy Tarcher/Putnam, 2003.
- 'The Fairies vs. the Money Economy.' In Monaghan, Patricia, ed. *Irish Spirit: Pagan, Celtic, Christian*, Global. Dublin: Wolfhound Press, 2001, p. 307-311.
- Logan, Patrick. *The Holy Wells of Ireland*. Gerrards Cross: Colin Smythe, 1980.
- *The Old Gods: The Facts About Irish Fairies*. Belfast: Appletree Press, 1981.
- Lupi, O. 'Myiasis as a risk factor for prion diseases in humans.' 1: *Journal of European Academic Dermatology Venereol*. 2006 Oct;20(9):1037-45.
- Liotard, J-F. *The postmodern condition: a report on knowledge*. Manchester: Manchester University Press, 1984.
- MacManus, Dermot. *The Middle Kingdom: The Fairie World of Ireland*. Gerrards Cross: Collin Smythe, 1959.
- MacNeill, Máire. *The Festival of Lughnasa, Parts I and II*. Dublin: Comhairle Bhéaloideas Éireann, 1982, p. 167-168.
- Michael, Mike. 'Lay Discourses of Science: Science-in-General, Science-in-Particular, and Self.' *Science, Technology and Human Values*. Vol 17, No 3 (Summer 1992), P. 313-333.
- Nabokov, Peter. *Where the Lightning Strikes: The Lives of Native American Sacred Places*. New York: Viking, 2006.
- O hEochaidh, Séan. *Fairy Legends of Donegal*. Translated by Máire MacNeill. Dublin: Comhairle Bhéaloideas Éireann, 1977.
- Peat, F. David. *Blackfoot Physics: A Journey into the Native American Worldview*. Grand Rapids, MI: Phanes Press, 2002.
- Pierotti, Raymond and Daniel Wildcat. 'Traditional Ecological Knowledge: The Third Alternative (commentary).' *Ecological Applications*. Vol 10, No. 5 (Oct 2000), p. 1333-1340.
- Vellerman, J. David. 'Narrative Explanation.' *The Philosophical Review*, Vol. 111, no. 1 (Jan 2003), p. 1-25.
- Yeats, William Butler. *Fairy and Folk Tales of the Irish Peasantry*. In *A Treasury of Irish Myth, Legend and Folklore*. New York: Gramercy Books, 1986.
- Westropp, T. J. *Folklore of Clare: A Folklore Survey of County Clare and County Clare Folk-Tales and Myths*. Ennis, Co. Clare: Clasp Press, 2000.

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